

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An adjustable oscillator circuit, comprising:
a timing capacitor capable of being charged or discharged at an adjustable rate;
an adjustable current source coupled to the capacitor for charging or 5 discharging the capacitor at the adjustable rate;
a threshold circuit for changing a charging or discharging state of the capacitor based on a charge value of the capacitor; and
a threshold value in the threshold circuit for comparison with the charge value of the capacitor to determine the change of charging or discharging state;
a switch in the adjustable current source operable to vary the current supplied to the capacitor; and
a digital to analog converter coupled to the switch and operable to receive input digital data and to provide an analog control signal to the switch to vary the current supplied to the capacitor based on the input digital data.
2. (Canceled)
3. (Canceled)
4. (Currently Amended) The oscillator circuit according to claim 2 1, further comprising a passive component coupled to the switch for setting a minimum amount of current supplied from the current source.
5. (Original) The oscillator circuit according to claim 1, further comprising a comparator in the threshold circuit for comparing the threshold value to the capacitor charge value.

6. (Original) The oscillator circuit according to claim 5, further comprising a threshold switch having an output coupled to the comparator and an input coupled to the threshold value to permit the threshold value to be selectively applied to the comparator.

7. (Original) The oscillator circuit according to claim 1, wherein the threshold value comprises a first and second threshold value, the first threshold value determining a transition point between one of charging and discharging and the second threshold value determining a transition point between the other of charging and discharging.

8. (Original) The oscillator circuit according to claim 7, further comprising a comparator in the threshold circuit having an input coupled to the capacitor and another input selectively coupled to at least one of the first and second threshold.

9. (Original) The oscillator circuit according to claim 8, further comprising a switch having an output coupled to the comparator and an input coupled to at least one of the first and second threshold, whereby the first and second threshold are selectively applied to the input of the comparator.

10. (Original) An electronic ballast control comprising the oscillator circuit according to claim 7.

11. (Currently Amended) A method for providing a variable frequency signal, comprising:

charging or discharging a capacitor at a selected rate to obtain a variable capacitor charge value;

determining when the capacitor charge value reaches a predefined value; changing the charging or discharging state of the capacitor; and

controlling the selected rate with a digital value, wherein the controlling step further comprises;

varying a current supplied to the capacitor;
receiving input digital data via a digital to analog converter; and
providing an analog control signal from the digital to analog converter to vary the current
supplied to the capacitor based on the input digital data.